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ABSTRACT

A virtual machine with mechanisms for class loading and class structure management in a device having limited file system and/or memory resources. The virtual machine includes a class loader that obtains one or more of a set of predefined classes from a network server, thereby reducing or eliminating the need for a local file system in the device. The class loader stores the predefined classes into a class structure in memory in the device. The virtual machine further includes a memory manager that purges selected ones of the predefined classes from the class structure so as to optimize the use of the memory consumed by the predefined classes in the class structure.